Original article

New Challenges and Pedagogical Approaches of Curriculum

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Abstract

From the renaissance to now, many more inventions have been patented in the area of education and curriculum like Over Head Projector, Film Projector, Epidiascope, computer and many more. But a curriculum every time facing challenges of time, place and language when renovated. The teacher has been trying to be skilled every day by filling the generation gap and gap of technology. It was expressed in University Education Commission 1948-49 (also known as Radhakrishnan Commission) that the most important and urgent reform needed in education is to transform it, to endeavour to relate it to the life, needs and aspirations of the people and thereby make it the powerful instrument of social, economic and cultural transformation necessary for the realisation of the national goals. For this purpose, education should be developed to increase, produce, achieve, social and national integration by accelerating the process of modernisation, globalisation and technocrat with cultivating social, moral and spiritual values. Therefore, to fulfil the demand of globalised education, it needs to understand the challenges of the curriculum. This research article emphasises on the new challenges of the curriculum by suggestive pedagogical approaches.

Keywords: Curriculum, Pedagogical Approach, Learning, Challenges, University Education Commission.

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INTRODUCTION

The universities of ancient India owe a lot to our ancient or mediaeval centres of learning. The sabhas or assemblies of Brahmanas learned in the Vedas and Dharma Sutras probably attracted some students desirous of acquiring knowledge. Later the well-organised centres of education or learning were established by various dynasties, like Taxila by Moryas and Nalanda by Guptas. At that time Taksasila and Nalanda have prepared their curriculum including the Vedas and the Upnishadas with comprised of agriculture, medicine, surgery, astronomy, astrology, agriculture, accountancy, archery and some para-vidyas. Further Jainism and Buddhism imparted some other ideas like Shyadvada, Triratnas, Asthangik Margs, Nirvana and Mahabhinishkramana, etc. with the systems of philosophy and logic. There was a close relationship between the teacher and pupil. The knowledge was transferred with an individual instruction and diversified discussions, through a practical curriculum. Kanchi in southern India and Vallabhi in today's Gujrat were great centres of learning parallel to Nalanda in Patliputra. Here the students being specialised in logic, law and grammar also. As we know that there is no any written script or document of Socrates but he is being preferred to study their concepts and theories. Here in India, curriculums were prepared after of discussion by the Rishis-Munis, Gurus, Swamijis and king of that particular area or Rajya. In medieval period Maqtab and Madarsa were formed to teach and learn the religious elements. (Mishra and Singh, 2016) described three types of curriculum as explicit, implicit and null. These three were also defined in Vedas.

Today there is a range of universities, institutions, schools, NGOs and content but (Gatto, 2017) worried about that "I have noticed a fascinating phenomenon in my thirty years of teaching. Schools and schooling are increasingly irrelevant to the great enterprises of the planet. No one believes anymore that scientists are trained in science classes or politicians in civics classes or poets in English classes. The truth is that schools do not really teach anything except how to obey orders. This is a great mystery to me because thousands of humane, caring people work in schools as teachers and aides and administrators, but the abstract logic of the institution overwhelms their individual contributions. Although teachers to care and do work very, very hard, the institution is psychopathic - it has no conscience. It rings a bell and the young man in the middle of writing a poem must close his notebook and move to a different cell where he must memorize that humans and monkeys derive from a common ancestor."

New challenges of curriculum

The wonderful words of Albert Einstein "you can't solve a problem on the same level that it was created. You have to rise above it to the next level" gives a message to the innovators, policy makers, teacher educators and teachers that every invention keeps a history of its earlier failures. Therefore, every innovation in the curriculum will also come with new challenges every time. Some challenges are discussed here with.

Less Government attention

We are going upward in technology but the attention of Government of India is being less. According to *Time of India* (February 6, 2017), from last three years, total spending on education has been falling. The total expenditure in 2013-14 was 4.57%, whereas it was declined to 3.65% in 2016-17. The newspaper informed that *"These are not mere numbers. Their importance for India lies in that public spending on education is a must for making it available for all, and in better quality. While government policymakers since UPA's times have been congratulating themselves for bringing almost all the children aged 6-13 years to elementary school, little attention has been paid to the fact that after this stage, it is downhill all the way. Gross enrolment ratios (number of students in school at a particular stage as a percentage of all children in the concerned age group) rapidly deteriorate after elementary school, going down to just 54% by senior secondary level. In other words, roughly half the children are out of school by the time they are senior school age. This works out to about 35 million kids out of school."* Besides it, in most advanced countries higher education is better than India. Here only 24% of the total youth population is enrolled in higher education, while in advanced countries 50%. In India, about 71 million youth are still out of the higher education system. In which a maximum number of drop-out is from Dalits, Adivasees and other marginal groups. *Therefore, the Government should proper attention on elementary, secondary and higher education through its agencies, are engaged in the development of education in India.*

### *Improper implementation of RTE Act-2009*

*The right to Education Act-2009 is mandatory in all schools of India to give the right to all children of age group 6-14 years to bright their future. According to RTE Act-2009, it is necessary to follow the norms of pupil-teacher ratio, the physical infrastructure of the school, school working days, teacher working hours and reservation of 25% places in private schools. Studies have shown that only about 10% of the schools fulfil all the norms. Bringing up the other schools to the RTE Act-2009 will demand massive resources. Annual Status of Education Report 2016 (ASER) shows in **Graph-1** that percentage of children of age group 6-14 is decreased.*
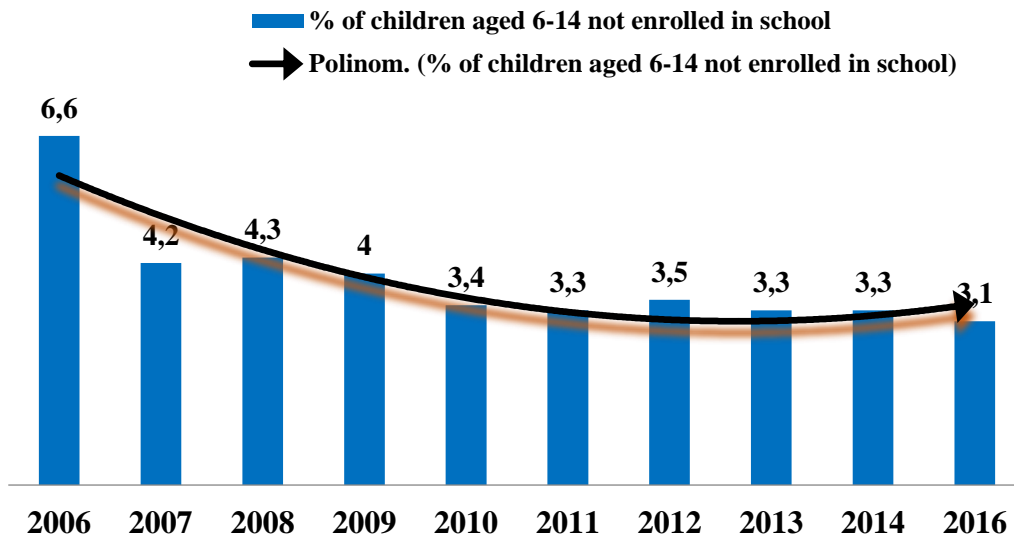
Graph (1) % of children aged 6-14 not enrolled in school
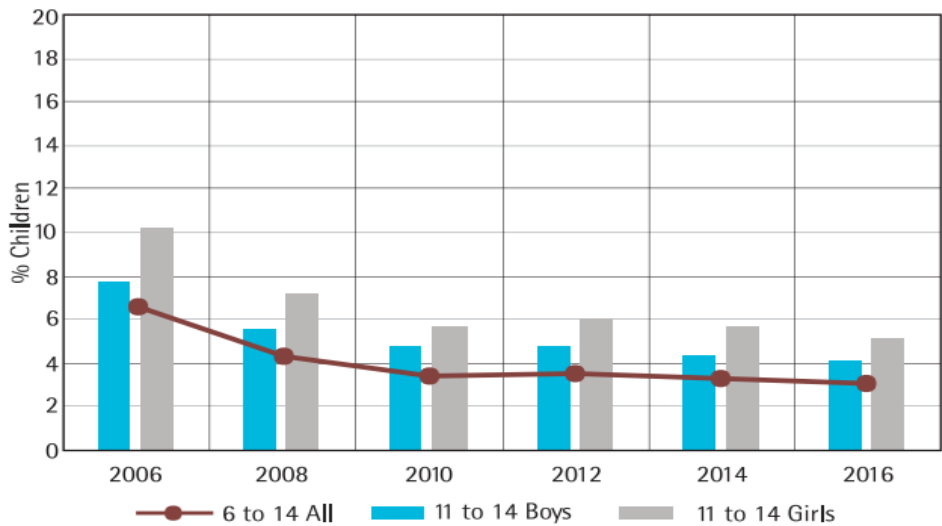
(Source: Annual Status of Education Report 2016)

In the other hand, Families are spending more and more money on education is rising (It is shown in **(Graph-2)** that expenditure on school education as percentage of GDP is uprising unevenly.), *while quality is speedily falling down day-by-day. Today's students are depending on private tuition. If the system is starved of ready money, it could be a tragedy in the making. The data form Annual Status of Education Report 2016 (ASER), was collected from 589 districts out of 619 of India, shows that in the decade 2006-2016, numbers of boys and girls of age group 11-14, who were dropped out or not enrolled in schools (as shown in* **Graph-3***) is increased.*
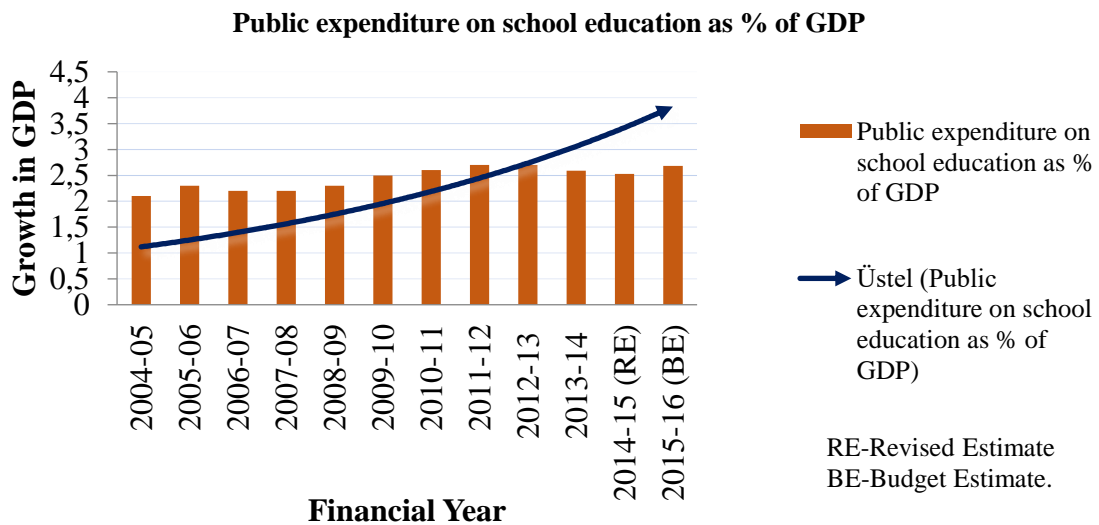
Graph (2) Public expenditure on school education as % of GDP

(Source: Centre for Budget Governance and Accountability)

Graph (3) % of Children not Enrolled in Schools

(Source:http://img.asercentre.org/docs/Publications/ASER%20Reports/ASER%202016/4%20pagers/enrollmenta
ndlearningreportcard_english.pdf)

Implantation of personal decisions

Education is an everlasting process. We will never complete our education. On the other hand, it is mainly an insight which comes from within. Teaching can encourage and plays an imperative role as a manual, can help to explore already exist abilities. Sometimes, it is commonly heard from peoples that policies and curriculums are prepared in the restrooms of the policy makers. It is the duty of policy makers to free from personal biases. It is well known that philosophy helps in decision making for structuring the curriculum. But personal philosophy can destroy its basic structure and quality. Thomas Hopkins (1941) for the importance of philosophy in curriculum wrote that "philosophy has entered into every important decision that has ever been made about curriculum and teaching in the past and will continue to be the basis of every important decision in the future...There is rarely a moment in a school day when a teacher is not confronted with an occasion where philosophy is a vital part of the action."

Imposingness of political spices

Curriculum development is a systematic process of purposeful and progressive planning in order to create positive improvement in the educational system and Politics is a systematic, purposeful and progressive strategy helps to improve the community and society. Thus both have the aim of progression but today politics is converting into social disputes and disparities. The tragedy of our country is that less educated peoples do not understand the working of Government. Today, we need politics of education that will help to teach leadership, classroom management, school administration, planning of

curriculum, making strategies for teaching etc. The boards, established by the Central Government cater to the Central Board of Secondary Schools, Navodaya Vidyalayas and Kendriya Vidyalayas and generally other expensive schools where the children of bureaucrats of the population admit. In the other hand, schools of the state Government do not hold the option for the quality of teachers, more refined lab facilities etc. This type of notable variations creates a polarised environment which is a live example of shutting off the door of chances for children of all demographic regions. Therefore, these political disturbances destroy the quality and originality of education.

Private tuitions

The report of PRATHAM, on the basis of obtained data from research, proposes to stop private. Data show that the percentage of children of class first to fifth (I to V), who take private input like a private school, private tuition or both during schooling has been increased from 38.5 percent to 42 percent in the year from 2010 to 2011 and from 44.2 to 45.1 percent from the year 2012 to 2013. For example, if families are spending around 100 rupees in Government schools. Then, students of private schools are spending around 101 to 200 rupees for extra private tuition. Today it needs to change the teacher. If not then is a need to action against.

Nature of excessive opportunistic trend

Every teacher of today is not engaged in innovative practices. A few of them, whom particular interest is for it, will meet us, if we arrange an informal survey to know the perception about teaching profession. During teaching in teacher training college, I experientially felt that no one of the teacher trainees wants to do admission in this course, if this course has no any opportunity of Government Job. The current paradigm has requirement of balanced attitude to teaching, innovative learning and skilled application.

Use of traditional teaching method till today

Schools of today are needed to do more efforts for evaluating teaching strategies that which type of practice and which method are useful for effective teaching? It is also the duty of schools to disgrace bad practices routed out from its classrooms. Robert Coe, Director of the Centre for Evaluation and Monitoring and Professor in the School of Education, at Durham University, said "Great teaching cannot be achieved by following a recipe, but there are some clear pointers in the research to approaches that are most likely to be effective, and to others, sometimes quite popular, that are not. Teachers need to understand why, when and how a particular approach is likely to enhance students' learning and be given time and support to embed it in their practice."

Pedagogical approaches for new curriculum challenges

Friedrich Wilhelm Nietzsche (2007), the famous German philosopher, who challenged the foundations of Christianity and traditional morality, wrote in his book "*Twilight of the Idols with the Antichrist and Ecce Homo*" that *"…dancing in all its forms cannot be excluded from the curriculum of all noble education; dancing with the feet, with ideas, with words, and, need I add that one must also be able to dance with the pen that one must learn how to write?…. (p.47)"*

Harnessing of knowledge with new ways of teaching and learning

Facing with new skills of teaching and learning will provide new insights. The fresh insights will help to support for the innovative, flexible and diverse society of education. Therefore, it is the duty of a teacher to use newly invented approaches for teaching and learning. These approaches are influenced by an evolving discussion of teachers, researchers and other education experts. *The Social Sciences and Humanities Research Council (2012)* of Canada has identified six new futuristic aspects of supporting teaching and learning by encouraging research preparedness, informing decision-making, expanding cross-sector collaboration and partnerships for research and training.

✓ New ways of learning to succeed in an evolving society.

✓ Position of natural resources

✓ Experiences and aspirations

✓ Global demands

✓ Benefits from emerging technologies and

✓ Knowledge to interconnect with the global world

Refurbishing teacher education for quality teachers

Teacher Education is measured as weakest part in the whole education system of India. Every Government is reforming education policies with less focus on teacher education. If the teacher is not good then how will the disciple make sugar? Here is a burning need to have a brand new perception for preparing dynamic teachers. Lee Elliot Major, *Director of Policy and Development* of the *Sutton Trust* in *What Makes Great Teaching* said "It's a scandal that we are so concerned with the learning of pupils, yet neglect the professional development of teachers themselves. Good quality teachers are the agents of social mobility able to transform the achievement pupils from poorer backgrounds. This research review debunks many of the teaching myths but also reveals the core lessons for schools to help them develop great teachers." The National Curriculum Framework for Teacher Education 2009 (NCFTE) includes guidelines of RTE Act 2009 with social and moral ethics, training of brain through arts and

crafts, music, physical Education and, life skills including inclusive education to ensure overall development of all type of learners.

Report of NPE 2016 in favour of human knowledge described that *"Technology alone cannot be the solution to the problem of poor quality of education; the human factor is equally, if not more, important. The Committee recognises that the teacher is the pivot around which the education system revolves; sadly, we have not succeeded in attracting good students to the teaching profession; added to that, most teacher education courses have little substance. The Committee has made several recommendations to improve the quality of teacher training and education because, without good teachers, there can be no quality education." (p.4)* Therefore, it is the demand of time that policies also need to be reframed by earmarking all minimum standards. There is a need of separate board for accreditation and assessment quality of teacher education and teacher education institutions.

Promotion of ICT in Schools and Teacher Training Institutions

The Committee for Evolution of the New Education Policy 2016 gave attention that "The essential component related to the establishment of *smart schools* designed to become technology demonstrator. Till the year 2015, 85127 ICT (Information and Communication Technology) enabled schools were established in the country under RMSA (p.44)." For use of assistive devices in schools, a teacher must be friendly with the computer and its functioning. So, training of technology to use in education must be compulsory for every pre-service teacher as well as for in-services teachers. NCFTE-2009 has favoured for implementing ICT in teacher training.

Diversifying the teaching approaches

If we want to make a global curriculum, then we need to diversify the teaching approaches by making colleague-colleague interaction, by multilingual interaction in classroom, by teacher-teacher interaction, by teacher-administration interaction, by demonstration, by experimental exercises, by giving projects in groups, by preparing learners for self-discipline, by group discussions, by taking help to arrange assistive devices carefully in self-presence. Every class should be started with the brainstorming technique, to make mental attention of learners. A teacher can use following diversifying techniques.

1. By giving open-ended projects for maximum creativity and differentiation.

2. By arranging community survey to tie interest of the learner.

3. By stimulating the senses of learners by incorporating audio, visual, kinesthetic and tactile components in the classroom, using graphical and pictorial demonstrations in the classroom.

4. By using multiple approaches with an understanding of the learner.

5. By giving assignment according to the learners' choice with the targeted time by learners.

6. By giving individual feedback to the work of the learner.

7. By avoiding competition and explaining fairness.

8. By sharing own experiences with the learners.

Gather information about the learner with remembering individual differences

When the learner comes to the school, He does not know about the functioning of the school, classroom and behaviour of teachers. In old testaments, the image of teacher reflected as ideal. Indian Vedas, Upanishads and epics give information about the ideal image of a teacher and all this is taught in the home environment of India. It means social environment affects the traits of the learner. Therefore, a teacher should understand the individual differences of the learner and then decide teaching strategies with multidimensional techniques. Gathering information of learner will help to decide classroom management, assignment distribution and proper evaluation of all learners.

Qualitative assessment of school for teaching strategies

An article entitled *"Government schools imparting poor quality education"* was published in *Down to Earth* magazine on January 17, 2014, raises the question that after getting a big fund from state and central Governments, why the quality of government school is going down. The question self-gives reasons of less attention of Governments on assessment of the quality of schools, its teacher and managing committee. Annual State of Education Report by PRATHAM (a Non-Governmental Organisation which was established in 1994 by the UNICEF and Municipal Corporation of Greater Mumbai to provide pre-school education to children in slums) tells that more than one-fourth of rural students opt for private schools for better education. The ASER report of 2015 says "the gap between private and government schools students' learning ability has been widening and that almost 29 percents of rural students choose to pay around Rs 100 to private schools to get an education. Besides, they also pay between Rs 100 and Rs 200 for private tuition."

Proper use of chalk and talk teaching

When technology was not developed then, the teachers use a common teaching strategy which is known as *Chalk and Talk*. It was most suitable technique for teachers as well as learners, where teacher works as audio aids and board as visual aids. Technology never be substitute of knowledge and ideas of a teacher. "When the chalkboard is used effectively in a lesson plan, it is not only a valuable visual aid to the pupils. It is also a force making for a sense of unity in the class. When all eyes are focused on the blackboard the class is united with itself and with the teacher in a way quite unattainable if every few minutes the pupils have to look down at maps on the desks in front of them. This sense of unity is important for reasons, which only a psychologist could explain it improves both the teacher's ability to

teach and the pupils' capacity to learn." (*from the report of UNICEF entitled "The chalkboard: a link between the teacher and the learner"*)

Methodology

This is a empirical research paper in which secondary data obtained online from (ASER, New Delhi) Annual Status of Education Report 2016 and Centre for Budget Governance and Accountability, New Delhi. The analysis of these secondary data is done. All graphs in the paper are prepared on the basis of same data.

Conclusion

It is very difficult to replace the old beliefs from the society but not impossible. So, it is not possible that a curriculum be free from minor drawbacks. But we can refine it according to change of needs of the society. To prepare and to implement a curriculum many problems are faced by the policy maker, teacher educators, teachers and learners. Therefore, policy makers, teacher educators, teachers and learners change strategies to overcome on these barriers. Due to absence or lack of teaching and learning resources, the teaching-learning process hampers. It will also faces difficulties when, it is not evaluated properly. Therefore, from the top to bottom it is need to invest for curriculum to face challenges and to make new strategies to glibness the education.

Today, era is becoming of technological rich. Although no comprehensive data on ICT in schools worldwide apparently exists, it is clear from many national examples that schools are also increasingly being equipped with ICT. It is also apparent that ICT equipment and Internet connectivity is still much more abundant in North American schools than elsewhere (Blurton, 1999). Therefore, our emphasis on Information and Communication Technology and its application in practical educaton should be to profound structural changes according to peripheral world. We should prepare our education system again for restructuring and renovating of the radio, telephone, television, publishing, entertainment, and computer industries to produce audio, video, textual, graphical and animated teaching and learning resources.

Suggestions

The ultimate goal of the educational system is to shift to the individual the burden of pursuing his education. (From knowledge to action: Shaping the future of curriculum development in Alberta, p. 217). This paper emphasises on the approaches to enrich the curriculum by embedding it with the Information and Communication Technology. Therefore, it is suggested in this paper to - (i) renovate the curriculum for global competencies; (ii) prepare the curriculum with flexibility of time; (iii) prepare the experiance based chiled centered curriculum; (iv) prepare ICT based curriculum; (v) prepare unbiased curriculum.

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